

Water Quality Report 2011

Summary – all contaminants measured within this report were compliant with EPA guidelines.

Water Source

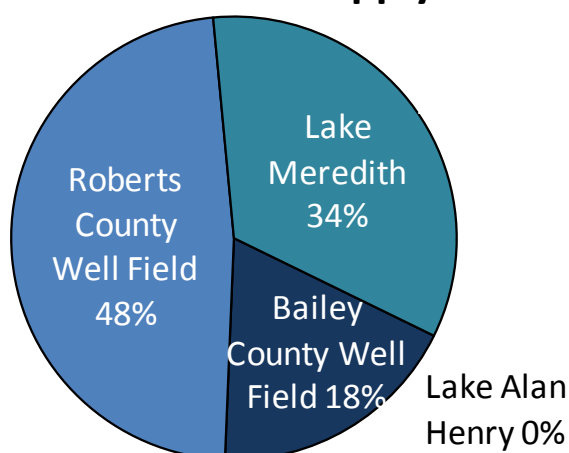
July 2012

Lubbock's drinking water comes from both surface and groundwater sources. During 2011, the Canadian River Municipal Water Authority (CRMWA) provided 56% of Lubbock's water supply from Lake Meredith and from Roberts County Well Field. Lake Meredith is located by Sanford, Texas, about 164 miles north of Lubbock, and the Roberts County Well Field is located about 40 miles east of Lake Meredith. The City owned Bailey County Well Field (BCWF) provided 44% of the City's water supply and is located about 65 miles northwest of Lubbock. During 2011, the citizens of Lubbock used 15.06 billion gallons of water with 8.38 billion gallons supplied by CRMWA and 6.68 billion gallons from BCWF.

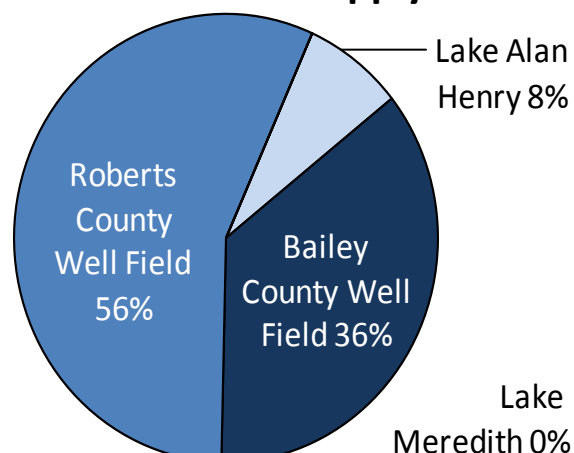
Transitioning Water Supplies

The City of Lubbock has relied upon both surface and groundwater for over 42 years. Before 1968, groundwater withdrawals from the sandhills in the BCWF and local well fields were enough to meet the City's total water needs. After 1968, with the availability of Lake Meredith water, groundwater usage greatly decreased. By the 1980s, Lake Meredith provided up to 90% of Lubbock's water supply. Approximately ten years ago, the water level in Lake Meredith began to decline and groundwater again began replacing the decreasing water supply. By September 2011, Lake Meredith's water levels had fallen too low for Lubbock to continue using water from the lake. From the fall of 2011 until today, the City has met its water needs with 100% groundwater from the well fields in Roberts and Bailey County. By the fall of 2012, a new water supply, Lake Alan Henry, will begin providing water to the City. In the future, approximately 20% of the City's needed water supply will come from this source. The completion of the Lake Alan Henry water supply project represents an important water supply milestone.

2008 Water Supply



2012 Water Supply



Drought Restrictions & Conservation

During drought conditions, we are reminded of our dependency on water. Knowing that the weather patterns on the South Plains are unpredictable, the City of Lubbock continues to work to provide a sustainable water supply. However, on April 1, 2012, the City was forced to implement Stage 2 of its drought contingency plan. This action was necessary with the loss of Lake Meredith last year and Lake Alan Henry not yet providing water to Lubbock. Stage 2 limits irrigation of landscaping to one time each week. When Lake Alan Henry starts providing the city with water in the fall of this year, the restrictions will be relaxed. Lubbock has ample water supplies available to meet its needs for decades to come. We are simply in a short-term water shortage as we transition between two water supplies making it difficult to meet peak summer demand without stringent water usage restrictions.

We should never confuse water conservation with drought restrictions. Water conservation should be practiced at all times. In the past decade, the citizens of Lubbock have worked hard to conserve water. In 1998, the City's water consumption was 223 gallons per capita per day (GPCD). By 2010, the water consumption had dropped more than 35% to 141 GPCD. The dramatic drop in water usage can be attributed to educating the public, the increasing cost of water, implementing "waste of water" regulations, and the desire of the people in the city to do the right thing. Most of our citizens know that water is a precious resource that is becoming more expensive to find and deliver.

EPA Guidelines for Your Water

This report is a summary of the quality of the water the City of Lubbock provides to our customers. The analysis was made by using data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what is in your drinking water. This report represents data for the year 2011.

Why Source Water Quality is Assessed

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

Special Information for People with Immune Systems Deficiencies

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly or immuno-compromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Tap Water versus Bottled Water

When drinking water meets federal standards there may not be any health-based benefits to purchasing bottled water or point of use devices. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information concerning taste, odor or color of drinking water, please call 806-775-2588. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Water Odor and Taste

Many constituents, (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

About This Table

The pages that follow list all of the federally regulated or monitored contaminants that have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

Term	Definition
AL	Action Level – if a contaminant rises above this level, treatment is required
MCL	Maximum Contaminant Level – the highest contaminant level legally allowed
MCLG	Maximum Contaminant Level Goal – the contaminant level below which there is no known health risk
MRDL	Maximum Residual Disinfectant Level – the highest disinfectant level legally allowed
MRDLG	Maximum Residual Disinfectant Level Goal – the disinfectant level below which there is no known health risk
NTU	Nephelometric Turbidity Units – a measure of the cloudiness of the water
ppb	part per billion – one part per billion or micrograms per liter
ppm	part per million – one part per million or milligrams per liter
Range	The lowest and highest contaminant levels measured
TT	Treatment Technique – a process intended to reduce the level of a contaminant in drinking water

The State allows us to monitor for some substances less than once a year because the concentration of these substances do not change frequently. Some of our data, though representative, are more than one year old.

^ Secondary Constituent Levels set by the Texas Commission of Environmental Quality.

* The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta particles.

~ (90th percentile) No sites exceeded AL

Contaminant	Year	MCL	Highest Level Detected	MCLG	Range	Contamination Source	Compliant
Regulated At Treatment Plant							
Alpha emitters	2011	15 pCi/L	4.7 pCi/L	0	N/A	Erosion of natural deposits	Yes
Arsenic	2011	10 ppb	5.9 ppb	0	2.8 – 5.9 ppb	Erosion of natural deposits, runoff from orchards	Yes
Barium	2011	2 ppm	0.136 ppm	2 ppm	0.104 - 0.136 ppm	Erosion of natural deposits	Yes
Beta/photon emitters	2011	50 pCi/L*	8.4 pCi/L	0	N/A	Decay of natural and man-made deposits	Yes
Chloramines	2011	MRDL = 4.0 ppm	3.9 ppm	MRDLG = 4.0ppm	0.5 - 3.9 ppm	Disinfectant used to control microbes	Yes
Chromium	2004 -2005	100 ppb	6.7 ppb	100 ppb	0 - 6.7 ppb	Erosion of natural deposits	Yes
Cyanide	2011	200 ppb	100 ppb	200 ppb	70 - 100 ppb	Erosion of natural deposits	Yes
Fluoride	2011	4 ppm	1.42 ppm	4 ppm	0.61 – 1.42 ppm	Erosion of natural deposits	Yes
Nitrate	2011	10 ppm	1.49 ppm	10 ppm	1.37 - 1.49 ppm	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion	Yes
Selenium	2011	50 ppb	3.4 ppb	50 ppb	0-3.4 ppb	Erosion of natural deposits	Yes
Total organic carbon	2011	TT	4.00 ppm	TT	0.28 – 4.0 ppm	Naturally present in environment	Yes
Turbidity	2011	TT = 5 NTU (TT = % of samples <0.3 NTU)	(100%)	0	0.03 - 0.11 NTU	Soil runoff	Yes
Additional Monitoring							
Aluminum	2011	0.05 - 0.2ppm^	0.03 ppm	N/A	N/A	Water treatment chemical	Yes
Ammonia	2011	Not Regulated	0.44 ppm	N/A	N/A	Water treatment chemical	Yes
Calcium	2011	Not Regulated	53 ppm	N/A	59 - 62 ppm	Naturally occurring	Yes
Chloride	2011	300 ppm ^	219 ppm	N/A	N/A	Naturally occurring	Yes
Conductance	2011	Not Regulated	1520 micromhos/cm	N/A	N/A	Naturally occurring	Yes
Hardness	2011	Not Regulated	252 ppm	N/A	N/A	Naturally occurring	Yes
Magnesium	2011	Not Regulated	29 ppm	N/A	N/A	Naturally occurring	Yes
Nickel	2011	Not Regulated	0.002 ppm	N/A	N/A	Erosion of natural deposits	Yes
Sodium	2011	Not Regulated	161 ppm	N/A	N/A	Naturally occurring	Yes
Sulfate	2011	300 ppm ^	199 ppm	N/A	N/A	Naturally occurring	Yes
Total alkalinity	2011	Unregulated	197 ppm	N/A	N/A	Naturally occurring	Yes
Total dissolved solids	2011	1000 ppm^	749 ppm	N/A	N/A	Naturally occurring	Yes
Zinc	2011	5 ppm^	0.008 ppm	N/A	N/A	Naturally occurring	Yes
Regulated At The Customers' Tap							
Copper	2009	1.3 ppm AL	0.103 ppm ~	1.3 ppm	0.018 - 0.243ppm	Erosion of natural deposits, corrosion of household plumbing systems	Yes
Lead	2009	15 ppb AL	1.72 ppb ~	0	0 - 6.91 ppb	Erosion of natural deposits, corrosion of household plumbing systems	Yes
Unregulated Initial Distribution System Evaluation For Disinfection Byproducts							
Total haloacetic acids	2008	N/A	15.4 ppb	N/A	0 - 21.8 ppb	By-product of drinking water disinfection	Yes
Total trihalomethanes	2008	N/A	31.9 ppb	N/A	0 - 45.6 ppb	By-product of drinking water disinfection	Yes
Regulated In The Distribution System							
Haloacetic acids (5)	2011	60 ppb	4.1ppb	N/A	0-9.6 ppb	By-product of drinking water chlorination	Yes
Total coliform	2011	Coliform bacteria present in 5% or more of the monthly samples	0	0	0%	Naturally present in the environment	Yes
Total trihalomethanes	2011	80 ppb	15.0 ppb	N/A	4.3-32.2 ppb	By-product of drinking water chlorination	Yes
Unregulated Contaminants							
Bromodichloromethane	2011	N/A	1.3 ppb	N/A	N/A	By-product of drinking water disinfection	Yes
Bromoform	2011	N/A	2.7 ppb	N/A	N/A	By-product of drinking water disinfection	Yes
Chloroform	2011	N/A	0.3 ppb	N/A	N/A	By-product of drinking water disinfection	Yes
Dibromochloromethane	2011	N/A	3.8 ppb	N/A	N/A	By-product of drinking water disinfection	Yes
Unregulated Contaminant Monitoring Rule 2 Data Collection							
N-Nitrosodimethylamine	2010	N/A	0.0046 ppb	N/A	0-0.0046 ppb	By-product of drinking water disinfection, industrial solvent, rocket fuel production	Yes

Water Quality Report 2011



Where to Find Additional Information about Your Water

A Source Water Susceptibility Assessment for your drinking water sources is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus our protection strategies. Some of this source water assessment information will be available later this year on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/>. For more information on source water assessments and protection efforts at our system, please contact us.

Water Quality Contact Information

The Safe Drinking Water Hotline: **800-426-4791**

City of Lubbock Water Treatment Lab: **806-775-2614**

Weekdays 7:30 a.m. and 4:30 p.m.

Lubbock Water Utilities Department of Education and Backflow Compliance: **806-775-3596**

Weekdays 8 a.m. and 5 p.m.

City of Lubbock Water Department Website: <http://water.ci.lubbock.tx.us>

Homes with Lead Piping

Elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. This water supply is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.